



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,191	11/17/2000	Christof Mock	199750US0	5418
26474	7590	10/06/2003	EXAMINER	
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			VO. HAI	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,191

Applicant(s)

MOCK ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,11-14 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,11-14 and 16-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 5, 6, 9, 10 and 15 have been canceled in the amendment received on 07/01/2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7, 8, 11-14 and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor et al (DE 195 44 451) in view of Lee (US 4,866,110) and De Zen (WO 98/01275). The page numbers referred to below correspond to those of the English translation of the Germany Patent of DE 195 44 451.

Further, US 6,253,527 is an equivalent form of WO98/01275 and will be relied on as a translation of WO98/01275. Molitor teaches a sandwich board comprised of a core layer of polypropylene particle foam and two cover layers of glass mat reinforced polypropylene (page 1). While Molitor does not specifically disclose decorative layer, the decorative layer claimed by Applicants are optional.

Therefore, this composite panel without decorative layers reads on Applicants' sandwich panel. Molitor teaches the foam particle having a particle size of 2 to 8 mm and density from 0.03 to 0.08 g/cm³ within the claimed ranges (page 3). Molitor does not specifically disclose using 1 to 10% by weight of recycled material. Lee, however, teaches a thermoplastic molded product for uses in vehicle door trim comprising polypropylene and 2-3% by weight of a leather

powder, 1.7 to 2.3 % by weight of a chopped glass fiber (abstract), meeting the range set out in the claims. Lee discloses the leather powder obtained from the waste products from finishing leather and glass fiber from waste glass fiber and the use of such recycled materials to produce a composition having excellent moldable properties and light-weight (column 4, lines 25-30; column 5, lines 25-30 and column 6, lines 30-36). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use recycled materials in the core layer of the sandwich panel motivated by the desire to produce a composition having excellent moldable properties and light weight, further to reduce the production costs and achieve important environmental benefits by using up waste material which would otherwise have to be disposed of at an appropriate site.

Molitor does not specifically disclose the particle size of the recycled material. Therefore, it is necessary and thus obvious for the skilled artisan to look to the prior art for the suitable particle size of the recycled material. De Zen (US 6,253,527) teaches a composite material for uses in vehicle door panels comprising a mixture of thermoplastic particles and particles of wastes which have a particle size about of 1 cm or 10 mm (column 2, lines 25-30), meeting the range set out in the claims. In an absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the recycled materials having a particle size instantly claimed, because such a particle size is a very common, typical one of the recycle

materials when used in the composite material and De Zen provides necessary details to practice the invention of Molitor.

With regard to claims 2 and 3, Molitor discloses using glass mat reinforced polypropylene cover layers wherein the glass fiber content is from 20 to 60% by weight of the cover layer (page 2).

With regard to claims 4, 12, 19, 20, 23 and 24, the decorative layer claimed by Applicants are optional. Therefore, a composite panel without decorative layers reads on Applicants' sandwich panel.

With regard to claims 7, 8 and 11, Molitor teaches a core layer A consisting of a polypropylene homopolymer that has a melting point of 125°C to 155°C within the claimed range (page 3).

With regard to claims 18-20, Molitor teaches the cover layer having a thickness of 2 to 5 mm within the claimed range (page 4).

With regard to claim 25, Molitor teaches the composite panel for uses in vehicle floors (page 4).

Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 7, 8, 11-14 and 16-25 have been considered but are moot in view of the new ground(s) of rejection.
5. The claim objections, the 112 claim rejections and the art rejections in the Office Action mailed on 02/25/2003 have been overcome by the present amendment and response.

Conclusion

Art Unit: 1771

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on M,T,Th, F, 8:30-6:00 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700